Tentative Interim Amendment

NFPA® 70®

National Electrical Code®

2020 Edition

Reference: 725.121(C)
TIA 20-1
(SC 19-8-19 / TIA Log #1438)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 725.121(C) to read as follows:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and maximum current or maximum voltage and nominal current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used. For equipment with a rated current per conductor less than 0.3 amperes, the effective date shall be January 1, 2021.

Issue Date: August 6, 2019

Effective Date: August 26, 2019

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/docinfo**)**

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Reference: 210.52(C)(2)
TIA 20-2
(SC 19-8-20 / TIA Log #1442)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 210.52(C)(2) to read as follows:

210.52(C)(2) Island and Peninsular Countertops and Work Surfaces. Receptacle outlets shall be installed in accordance with 210.52(C)(2)(a) and (C)(2)(b).

(a) At least one receptacle shall be provided for the first 0.84 m^2 (9 ft^2), or fraction thereof, of the countertop or work surface. A receptacle outlet shall be provided for every additional 1.7 m^2 (18 ft^2), or fraction thereof, of the countertop or work surface.

(b) At least one receptacle outlet shall be located within 600 mm (2 ft) of the outer end of a peninsular countertop or work surface. Additional required receptacle outlets shall be permitted to be located as determined by the installer, designer, or building owner. The location of the receptacle outlets shall be in accordance with 210.52(C)(3).

A peninsular countertop shall be measured from the connected perpendicular wall.

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Reference: 725.121(C)
TIA 20-3
(SC 19-8-21 / TIA Log #1444)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 725.121(C) to read as follows:

725.121(C) Marking. The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and rated current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used.

Informational Note No. 1: Rated current for power sources covered in 725.144 is the output current per conductor the power source is designed to deliver to an operational load at normal operating conditions, as declared by the manufacturer.

Informational Note No. 2: An example of a label is "52V @ 0.433A, 57V MAX" for an IEEE 802.3 compliant Class 8 power source.

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Reference: 240.67(C) and Informational Note (new)
TIA 20-4
(SC 19-8-22 / TIA Log #1451)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 240.67(C) to read as follows:

240.67(C) Performance Testing. ~~Where a method to reduce clearing time is required in 240.67(B), the~~The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer's instructions.
~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer's recommended test procedures.~~
A written record of this testing shall be made and shall be available to the authority having jurisdiction.

Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

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Reference: 240.87(C) and Informational Note (new)
TIA 20-5
(SC 19-8-23 / TIA Log #1452)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise 240.87(C) to read as follows:

240.87(C) Performance Testing. The arc energy reduction protection system shall be performance tested by primary current injection testing or another approved method when first installed on site. This testing shall be conducted by a qualified person(s) in accordance with the manufacturer's instructions.
~~Performance testing of an instantaneous element of the protective device shall be conducted by a qualified person(s) using a test process of primary current injection and the manufacturer's recommended test procedures.~~
A written record of this testing shall be made and shall be available to the authority having jurisdiction.

Informational Note: Some energy reduction protection systems cannot be tested using a test process of primary current injection due to either the protection method being damaged such as with the use of fuse technology or because current is not the primary method of arc detection.

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Reference: Annex D3
TIA 20-6
(SC 19-8-24 / TIA Log #1455)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Revise Annex Example D3 to read as follows:

Example D3 Store Building
A store ~~50~~80 ft by 60 ft, or ~~3000~~ 4,800 ft^2, has 30 ft of show window. There are a total of 80 duplex receptacles. The service is 120/240 V, single phase 3-wire service. Actual connected lighting load is ~~8500~~ 7,000 VA, all of which for this example is considered continuous. All calculations are rounded up or down as permitted in 220.5(B).

Calculated Load
(see 220.40)

Noncontinuous Loads		
Receptacle Load *(see 220.44)*		
80 receptacles at 180 VA		14,400 VA
10,000 VA at 100%		10,000 VA
14,400 VA - 10,000 VA = 4,400 VA at 50%		2,200 VA
	Subtotal	12,200 VA
Continuous Loads		
General Lighting*		
~~3000~~4,800 ft^2 at ~~3~~ 1.9 VA/ft^2		~~9,000~~ 9,120 VA
Show Window Lighting Load		
30 ft at 200 VA/ft *[see 220.14(G)]*		6,000 VA
Outside Sign Circuit *[see 220.14(F)]*		1,200 VA
	Subtotal	~~16,200~~16,320 VA
	Subtotal from noncontinuous	12,200 VA
	Total noncontinuous loads + continuous loads =	~~28,400~~28,520 VA

*In the example, the actual connected lighting load at 125% (~~8500~~7,000 × 1.25 VA) is less than the load from Table 220.12, so the required minimum lighting load from Table 220.12 is used in the calculation. Had the actual lighting load × 125% been greater than the value calculated from Table 220.12, the actual connected lighting load would have been used.

Minimum Number of Branch Circuits Required

General Lighting: Branch circuits need only be installed to supply the actual connected load *[see 210.11(B)]*.
~~8500~~ 7,000 VA × 1.25 = ~~10,625~~ 8,750 VA
~~10,625~~ 8,750 VA ÷ 240 V = ~~44~~ 36.45 A for 3-wire, 120/240 V
8,750 VA ÷ 120 V = 72.92 A
The lighting load would be permitted to be served by 2-wire or 3-wire, 15- or 20-A circuits with combined capacity equal to ~~44~~ 36 A or greater for 3-wire circuits or ~~88~~ 73 A or greater for 2-wire circuits. The feeder capacity as well as the number of branch-circuit positions available for lighting circuits in the panelboard must reflect the full calculated load of ~~9000 VA × 1.25 = 11,250~~ 9,120 VA. Lighting loads from Table 220.12 already include 125% for continuous load. See note at bottom of Table 220.12.

Show Window

6,000 VA × 1.25 = 7,500 VA
7,500 VA ÷ 240 V = 31.25 A for 3-wire, 120/240 V
7,500 VA ÷ 120 V = 62.5 A for 2-wire, 120 V

The show window lighting is permitted to be served by 2-wire or 3-wire circuits with a capacity equal to 31 A or greater for 3-wire circuits or ~~62~~ 63 A or greater for 2-wire circuits.

Receptacles required by 210.62 are assumed to be included in the receptacle load above if these receptacles do not supply the show window lighting load.

Receptacles

Receptacle Load:
14,400 VA ÷ 240 V = 60 A for 3-wire, 120/240 V
14,400 VA ÷ 120 V = 120 A for 3-wire, 120/240 V

The receptacle load would be permitted to be served by 2-wire or 3-wire circuits with a capacity equal to 60 A or greater for 3-wire circuits or 120 A or greater for 2-wire circuits.

Minimum Size Feeder (or Service) Overcurrent Protection
(see 215.3 or 230.90)

Subtotal noncontinuous loads		12,200 VA
Subtotal continuous loads not from Table 220.12 at 125% (~~16,200~~ 7,200 VA × 1.25) (sign and show window)		~~20,250~~ 9,000 VA
Subtotal of calculated continuous loads with 125% already included ~~Total~~		~~32,450~~ 9,120 VA
	Total	30,320 VA

~~32,450~~ 30,320 VA ÷ 240 V = ~~135~~ 126 A
The next higher standard size is 150 A *(see 240.6)*.

Minimum Size Feeders (or Service Conductors) Required
[see 215.2, 230.42(A)]

For 120/240 V, 3-wire system,
~~32,450~~ 30,320 VA ÷ 240 V = ~~135~~ 126 A Service or feeder conductor is ~~1/0~~ 1 AWG Cu in accordance with 215.3 and Table 310.16 (with 75°C terminations).

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Reference: Table 430.252
TIA 20-7
(SC 19-8-26 / TIA Log #1462)

Note: Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. Delete Table 430.252 in its entirety:

Table 430.252 Minimum Size Equipment Grounding Conductors for Grounding Motor Circuits and Equipment

Rating or Setting of Branch Circuit Short-Circuit and Ground-Fault Protective Device in Circuit Ahead of Equipment, Conduit, etc., Not Exceeding (Amperes)	Size (AWG or kcmil)	
	Copper	Aluminum or Copper-Clad Aluminum*
15	14	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600
3000	400	600
4000	500	750
5000	700	1200
6000	800	1200

Note: Where necessary to comply with 250.4(A)(5) or (B)(4), the equipment grounding conductor shall be sized larger than given in this table.

*See installation restrictions in 250.120.

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Reference: 551.71(F)
TIA 20-8
(SC 19 12-4 / TIA Log #1474)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 70®, *National Electrical Code*®, 2020 edition. The TIA was processed by the Code-Making Panel 7 and the Correlating Committee on National Electrical Code, and was issued by the Standards Council on December 6, 2019, with an effective date of December 26, 2019.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards development procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards development process.

1. Revise 551.71(F) to read as follows:

551.71(F) GFCI Protection.

~~All 125-volt, single-phase, 15- and 20-ampere receptacles shall have listed ground-fault circuit-interrupter protection for personnel. The GFCI devices used in RV site electrical equipment shall not be required to be weather or tamper resistant in accordance with 406.9 and 406.12.~~

~~Informational Note: The percentage of 50-ampere sites required by 551.71 could be inadequate for seasonal recreational vehicle sites serving a higher percentage of recreational vehicles with 50-ampere electrical systems. In that type of recreational vehicle park, the percentage of 50-ampere sites could approach 100 percent.~~

Ground-fault circuit-interrupter protection shall be provided as required in 210.8(B). GFCI protection shall not be required for other than 125-volt, 15- and 20-ampere receptacles used in the recreational vehicle site equipment.

Informational Note No. 1: Appliances used within the recreational vehicle can create leakage current levels at the supply receptacle(s) that could exceed the limits of a Class A GFCI device.

Informational Note No. 2: The definition of *Power-Supply Assembly* in 551.2 and the definition of *Feeder* in Article 100 clarifies that the power supply cord to a recreational vehicle is considered a feeder.

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Tentative Interim Amendment

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Reference: 800.100(B)(2) Informational Note and Informational Note Figure caption
TIA 20-9
(SC 20-4-13 / TIA Log #1479)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 70, *National Electrical Code*, 2020 edition. The TIA was processed by the National Electrical Code Panel 16 and the NEC Correlating Committee, and was issued by the Standards Council on April 1, 2020, with an effective date of April 21, 2020.

1. Revise 800.100(B)(2) Informational Note and its associated Figure's caption to read as follows:

800.100(B)(2) …
Informational Note: Informational Note Figure 800.100(B)(2) illustrates the connection of the bonding conductor in buildings or structures not equipped with an intersystem bonding termination or a terminal block providing access to the building grounding means.

Informational Note Figure 800.100(B)(2) Illustration of a Grounding Electrode Conductor and a Bonding Conductor in a Communications Installation.

Issue Date: April 1, 2020

Effective Date: April 21, 2020

(Note: For further information on NFPA Codes and Standards, please see www.nfpa.org/docinfo**)**